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=> d his

     (FILE 'HOME' ENTERED AT 11:02:52 ON 13 APR 2005)
     FILE 'CA' ENTERED AT 11:03:10 ON 13 APR 2005
L1 11032 S ((3 OR THREE)(1W)(D OR DIMENSION?)OR 3D OR THREED OR CONTOUR OR
         SURFACE)(2A)(PLOT? OR DIAGRAM OR GRAPH OR GRAPHIC? OR DISPLAY? OR
         REPRESENTATION OR PICTURE)
L2     76 S L1 AND (TURBID? OR CLOUD? OR VICSO?)
L3    466 S L1 AND(EMULSION OR OIL(2A)(WATER OR H20) OR MICEL? OR DISPERSION)
L4     16 S L2 AND L3
L5      7 S L2-3 AND AUTOMAT?
L6    163 S L2-3 AND(TEMPERATURE OR DEGREE)
L7     76 S L6 AND(COMPOSITION OR CONCENTRATION)
L8    223 S L2-3 AND(COMPOSITION OR CONCENTRATION)
L9     57 S L8 AND(PHASE OR BOUNDARY OR RESPONSE OR PROPERTY OR PARAMETER)(2A)
         (PLOT? OR DIAGRAM OR GRAPH OR GRAPHIC? OR DISPLAY? OR
         REPRESENTATION OR PICTURE)
L10   173 S L2,L4-5,L7,L9
L11   126 S L10 NOT PY>1998
L12   113 S L11 NOT(ERASER OR TIO2 OR GALAXY OR ORE OR CLAY OR SEWAGE)
L13   103 S L12 NOT(CARBON BLACK OR PELLET OR VINEGAR OR STAR OR POLARON OR
         RADIO OR CERAMIC OR INTERSTEL?)
L14    82 S L13 NOT(LIDAR OR PPTN OR OPTICAL DISPLAY DEVICE OR ATMOSPHERE OR
         MAGMA OR RADIOAC? OR RAISIN)
L15    21 S L13 NOT L14
L16     6 S L15 AND(PRESSURE EFFECT OR TENSION OR WHEY OR WATER SYSTEM)
L17    72 S L14 NOT(NITRATE OR STERILIZ? OR MIXED CRYSTAL OR IONOSPHERE OR
         ALLOY OR RAW WATER OR CURIE OR FLOCCUL?)
L18    10 S L14 NOT L17
L19     1 S L18 AND WETTING
L20    79 S L16-17,L19

=> d bib,ab 1-79 120

L20  ANSWER 8 OF 79  CA  COPYRIGHT 2005 ACS on STN
AN   128:115466  CA
TI   Temperature Dependences of the Critical Micelle Concentrations of
     Diblock Oxyethylene/Oxybutylene Copolymers. A Case of Athermal
     Micellization
AU   Kelarakis, Antonis; Havredaki, Vasiliki; Yu, Ga-Er; Derici, Leo; Booth,
     Colin
CS   Department of Chemistry Physical Chemistry Laboratory, National and
     Kapodistrian University of Athens, Athens, 157  71, Greece
SO   Macromolecules (1998), 31(3), 944-946
AB   Plots of surface tension against the logarithm of concn. for aq. solns.
     of 1,2-butylene oxide-ethylene oxide block copolymer were presented.  In
     each case the nature of the assocn. to micelles in dil. soln. above the
     crit. micelle concn. was checked by dynamic light scattering.  Within
     the error of detn., the micellization of each copolymer was athermal.

L20  ANSWER 15 OF 79  CA  COPYRIGHT 2005 ACS on STN
AN   127:191315  CA
TI   Cloud-point temperatures of BnEmBn and PnEmPn type triblock copolymers
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in aqueous solution
AU Liu, Tianbo; Nace, Vaughn M.; Chu, Benjamin
CS Department of Chemistry, State University of New York, Stony Brook, NY, 11794-3400, USA
SO Journal of Physical Chemistry B (1997), 101(41), 8074-8078
AB The **cloud**-point temps. (Tcl) of 1% poly(oxybutylene)-poly(oxyethylene)-poly(oxybutylene) (BnEmBn) and of 1% poly(oxypropylene)-poly(oxyethylene)-poly(oxypropylene) (PnEmPn) were measured by detecting the sharp decrease in transmittance of the incident laser beam when phase sepn. occurs. The **cloud**-point temps. were studied as a function of the length of both hydrophobic and hydrophilic blocks. A linear increase in the hydrophobic block length (B or P) leads to an exponential decrease in the **cloud**-point temp. However, the middle hydrophilic block (E) shows only a weak pos. effect; i.e., an exponential increase in the block length leads to a linear increase in the **cloud**-point temp. On the basis of the available data, we can summarize our results in math. form and present a **three-dimensional plot** to predict the Tcl of BnEmBn (or PnEmPn) triblock copolymers. The middle E block has a stronger effect on PnEmPn than BnEmBn. It is also noted that one oxybutylene (B) unit has the effect equiv. to about 4.4 oxypropylene (P) units.

L20 ANSWER 20 OF 79 CA COPYRIGHT 2005 ACS on STN
AN 125:178044 CA
TI **Phase diagram** of water-sodium perfluorodecanoate-sodium decylsulfonate system
AU Akune, Takeshi; Abe, Mitsuhiro; Murata, Yoshio; Maki, Toshiya; Moroi, Yoshikiyo; Furuya, Hiromi; Tanaka, Mitsuru
CS Fac. Sci., Fukuoka Univ., Fukuoka, 814-01, Japan
SO Journal of Colloid and Interface Science (1996), 181(1), 136-141
AB **Phase diagrams** of Na perfluorodecanoate-water and Na decanesulfonate-**water systems** were drawn from changes of soly. and crit. **micelle concn.** (CMC) with **temp.** The mixed CMC values of the 2 surfactants of different **compns.** indicate that 2 kinds of **micelles** are formed; one is a fluorocarbon-dominant **micelle** and the other is a hydrocarbon-rich **micelle** with some fluorocarbon surfactants. The ppt. from aq. soln. contg. the 2 surfactants below the **micellization temp.** of the mixed surfactants (analyzed by x-ray diffraction) is a mixt. of the 2 surfactant crystals. An anal. was made of the **temp.** dependence of the elec. cond. of an aq. soln. contg. suspended ppts. which were formed at low **temp.** from soln. of a certain molar ratio of the 2 surfactants, and the **phase diagram** of the 3-component system was constructed. The **3-dimensional phase diagram** was quite different from that of mixed surfactants which are able to form mixed **micelles** of any **compn.**

L20 ANSWER 21 OF 79 CA COPYRIGHT 2005 ACS on STN
AN 125:67551 CA
TI Sequential statistical optimization of a positively-charged submicron **emulsion** of miconazole
AU Wehrle, Pascal; Korner, Daniel; Benita, Simon
CS Centre Recherches Pharmaceutiques, Universite Louis Pasteur Strasbourg, Illkirch, Fr.
SO Pharmaceutical Development and Technology (1996), 1(1), 97-111
AB A pos. charged **oil/water** (O/W) **emulsion** contg. an antifungal agent was

developed for ophthalmic use. An attempt was made using a sequential statistical methodol. to optimize the O/W **emulsion** by varying both formulation and process parameters to obtain the smallest droplet size **emulsion** that can remain stable for a long period of time. During the first step of the study, not less than 7 parameters were found to be important - drug content, amt. of lipophilic phase, poloxamer **concn.**, quantity of the phospholipids-stearylamine couple, pH adjustment, time of coarse emulsification and time of high pressure homogenization. A screening approach based on Hadamard's matrix was used to select the **parameters displaying** the most significant effects on response parameters. A first set of 8 expts. proved efficient enough to define the **concn.** of poloxamer and the quantity of the couple phospholipids-stearylamine, which confer the overall pos. charge to the emulsified droplet, as the most significant design was then built with the two main factors in order to evaluate a first-order polynomial model with interaction. Poor anal. of variance results after an addnl. center expt. was performed revealed the lack of fit of the linear model as well as the importance of the response surface curvature due to a close optimum location. To find the optimal operating conditions the design was sequentially completed with 4 more expts. according to the Box and Wilson method. The response surfaces in **3-dimensional representation** and their corresponding **contour plots** proved helpful in analyzing the validated models and in highlighting the precise optimum location. The optimized pos. submicron **emulsion** is now under in vivo investigation.

L20 ANSWER 30 OF 79 CA COPYRIGHT 2005 ACS on STN
AN 120:219171 CA
TI Equilibrium Thermodynamics of a Quaternary Membrane-Forming System with Two Polymers. 1. Calculations
AU Boom, R. M.; van den Boomgaard, Th.; Smolders, C. A.
CS Department of Chemical Technology, University of Twente, Enschede, 7500 AE, Neth.
SO Macromolecules (1994), 27(8), 2034-40
AB Liq.-liq. phase sepn. phenomena are investigated for a quaternary system contg. two polymers, a solvent, and a nonsolvent for one of the polymers which also is a solvent for the other polymer. The phase sepn. behavior studied is related to the membrane-forming properties of a system contg. a macromol. additive as a second polymer. To visualize the parts of the **three-dimensional** quaternary **phase diagrams**, semi-ternary cross-sections are used in which two components are regarded as a "lumped" component. **Cloud** point and shadow curves are given. The crit. point valid for a ternary system is extended into a crit. curve. The crit. curve at larger mol. wts. of the second polymer is situated at higher **concns.** of the membrane-forming polymer. A high mol. wt. of this second polymer causes the **phase diagram** to become insensitive to the various interaction parameters. At const. mol. wt. of the second polymer, the crit. curve shifts to higher polymer **concns.** upon increasing the **concn.** of the second polymer. Interaction effects appear to have a marginal influence, as long as the component pairs that were assumed to be miscible remain miscible.

L20 ANSWER 36 OF 79 CA COPYRIGHT 2005 ACS on STN
AN 115:44115 CA

TI Investigation of emulgation and **emulsion** stability of thiocarbamate herbicides

AU Dombay, Zs.; Mogyorodi, F.

CS North Hung. Chem. Works, Sajobabony, H-3792, Hung.

SO Proc. Conf. Colloid Chem. Mem. Ervin Wolfram, 5th (1990), Meeting Date 1988, 106-9. Editor(s): Kiss, E.; Pinter, J. Publisher: Lorand Eotvos Univ., Budapest, Hung.

AB Emulsification and **emulsion** stability (persistence in time) of thiocarbamate herbicides (ethiolate, EPTC, cycloate and butylate) were investigated through photometric measurement of **turbidity**. Influence of various parameters was evaluated. Investigations included combined herbicidal formulations. Results were analyzed and represented by computer in **three-dimensional diagrams**.

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STN INTERNATIONAL LOGOFF AT 11:47:57 ON 13 APR 2005